

FAST FACTS: COMMERCIAL TUNA FISHERIES

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- **Economic Importance:** Tunas and tuna-like species (true tunas, billfishes, and other tuna-like species) are an important food source, used mostly for canning and *sashimi*, and, due to their high economic value and extensive international trade, are an important global commodity. The export value of tuna products is about US\$5 billion. The value of global tuna products is 9% of total global fish trade.
- **Capture of Tunas:** Demand for canned and fresh tuna has been rapidly and steadily increasing: the reported catches of the principal market species of tunas increased from less than 0.2 million tonnes in the early 1950s to a peak of 4.3 million tonnes in 2003. Purse seine, pelagic longline and pole-and-line fisheries are the primary commercial fishing methods for catching tunas. Purse seine fisheries catch about 58%, longline 15%, pole-and-line 14%, 'other' gears (coastal artisanal gillnet, handline, etc.) 13%, and troll <1% of the total combined weight of global landings of the principal market species of tunas. Longline vessels generally catch older age classes of bigeye and bluefin tunas for the fresh fish market, while purse seine vessels catch younger age classes of target skipjack and yellowfin and incidental bigeye tunas. Like purse seiners, pole-and-line vessels catch fish close to the surface, catching mostly skipjack and small/juvenile yellowfin, albacore, and bluefin, and most of the catches are canned. There are several major countries catching tuna. The top four contributors to the 2002 tuna catch were Japan (550,000 tonnes, 18% of total global reported tuna landings), Indonesia (500,000 tonnes, 16% of total), Taiwan (460,000 tonnes, 15% of total), and the combined European Union member states (445,000 tonnes, 14% of total).
- **Tuna Consumption:** In 2005, 82% of tuna was consumed as canned product, 18% as fresh product (including as *sashimi*). Japan consumed 78% of the fresh tuna. In 2004, canned tuna consumption was highest in the European Union (734,444 tonnes) followed by the U.S. (445,847 tonnes), combined accounting for 83% of the total global consumption of canned tuna.
- **Status of Tuna Stocks:** Despite their high fecundity, most tuna stocks are fully exploited, and some are overfished or even depleted (all yellowfin, bigeye and bluefin stocks are fully or overexploited, some albacore stocks are overexploited). It is unlikely that the major tuna species can sustain greater catches. Even for the few remaining tuna stocks that are only moderately exploited (albacore in the south Atlantic and south Pacific, skipjack in the Pacific and Indian oceans), increased catches would not be sustainable because tunas of stocks that are fully/overexploited are caught together. Despite efforts by the five regional fisheries management organizations (through limited entry and catch quotas), there has been continued growth of tuna fleets and concomitant increased tuna fishing mortality, biological overfishing, stock declines, and fishing overcapacity.
- **Bycatch:** Bycatch of sensitive species groups, including sea turtles, seabirds, marine mammals and sharks, in purse seine and pelagic longline fisheries, and bycatch of juvenile and undersized tunas in purse seine fisheries, is problematic. There has been substantial progress to minimize direct mortality of dolphins in Eastern Pacific purse seine fisheries (despite dolphin conservation measures, dolphin populations have not been recovering at expected rates, perhaps because the stress on dolphins from having purse sets made on them causes miscarriages or separation and loss of dolphin calves), and identify effective methods to minimize seabird and sea turtle bycatch in pelagic longline fisheries. There has been relatively little progress to resolve the bycatch of sharks and whales in both longline and purse seine fisheries, sea turtles in purse seine fisheries, and juvenile/undersized tunas in purse seine fisheries. Relative to longline and purse seine fisheries, there are extremely low bycatch levels associated with pole-and-line fisheries, where there is some bycatch of juvenile kawakawa tuna, frigate mackerel, mahimahi, and rainbow runner, and discards have high post release survival rates due to the use of barbless hooks and flick-off practices.